



**SLMNA**  
SRI LANKA MEDICAL NUTRITION ASSOCIATION

**NEWSLETTER**  
SLMNA OFFICIAL NEWSLETTER

*Linking Nutrition Research to Practice*

# MESSAGE FROM EDITORS

Dear Members,

We delightfully announce that SLMNA organizes its 3<sup>rd</sup> Clinical Nutrition Annual Academic Sessions 2018 which is to be held on the 30<sup>th</sup> of November and the 1<sup>st</sup> of December. It is an excellent opportunity for our members to present your nutrition related research work or case presentations and upgrade your professional experience while contributing to the advancement of the field. Call for abstract is open from the 1<sup>st</sup> of July to the 30<sup>th</sup> of September 2018. Guidelines for abstract submission are available on our website [slmna.lk](http://slmna.lk).

## 3<sup>rd</sup> Clinical Nutrition Annual Academic Sessions

30<sup>th</sup> November – 1<sup>st</sup> December 2018  
Galle Face Hotel, Colombo

### CALL FOR ABSTRACTS



**THEME – ‘Healthy Ageing’**

**DEADLINE – 30<sup>th</sup> September 2018**

Organized by  
**SRI LANKA MEDICAL NUTRITION ASSOCIATION**



Please visit [slmna.lk](http://slmna.lk) for further details

# Contents

01. Past events
02. Capture of the month
03. Food of the month
04. Article of the month



## 01. Market Fair and felicitation for Dr. Seema Puri

The 'Market Fair' was a novel experience for MSc. Human Nutrition trainees to get themselves familiarized with a wide range of nutrition related products such as therapeutic formulas and nutraceuticals, and to critically evaluate those in view of making the most appropriate selection for the patients on medical nutrition therapy accordingly. It was successfully held on the 26<sup>th</sup> April 2018 at Grand Monarch, Thalawatugoda.

Felicitation for Dr. Seema Puri, the Associate Professor of the Department of Nutrition, Institute of Home Economics, University of Delhi was also held along with this event to express the heartfelt gratitude on behalf of SLMNA, for conducting the Dietetics course for MSc. trainees each year.

## 02. Clinical nutrition training for MD trainees in Thailand

The 1<sup>st</sup> and the 2<sup>nd</sup> batches of MD Clinical Nutrition have successfully completed a two weeks training in clinical nutrition attached to the Faculty of Public Health, Valaya Alangkorn Rajabhat University and The University of Mahidol, Thailand. It was an excellent opportunity for them in gaining exposure to updated clinical nutrition practices in the public and private health sectors of this South East Asian country and to actively participate in nutrition related policy development and implementation as a part of their postgraduate MD training.

## 03. Proteins for a Healthy Nation

A seminar for medical professionals on the theme "Proteins for a Healthy Nation" was held in Kandy on the 25<sup>th</sup> May 2018 at the Hotel Topaz. As this was organized in collaboration with SLMNA, Dr. Gamini Jayakody, on behalf of Dr. Renuka Jayatissa (President, SLMNA) and Prof. Sudheera Kalupahana (Vice President, SLMNA) made great contributions as guest speakers of this event.

## 04. Nutrition for weight lifters

SLMNA organized a nutrition education session for the weight lifting team of Royal College, Polonnaruwa, in collaboration with their past pupils' association. The initial session which included nutritional assessment and counselling was held on the 26<sup>th</sup> May 2018 at the Medical Research Institute, Colombo. The president of SLMNA, Dr. Renuka Jayatissa graced the event as the guest speaker, highlighting the importance of optimizing the nutritional status of these children with hidden talents in order to enhance their performance





## 05. Nutrition for people living with HIV

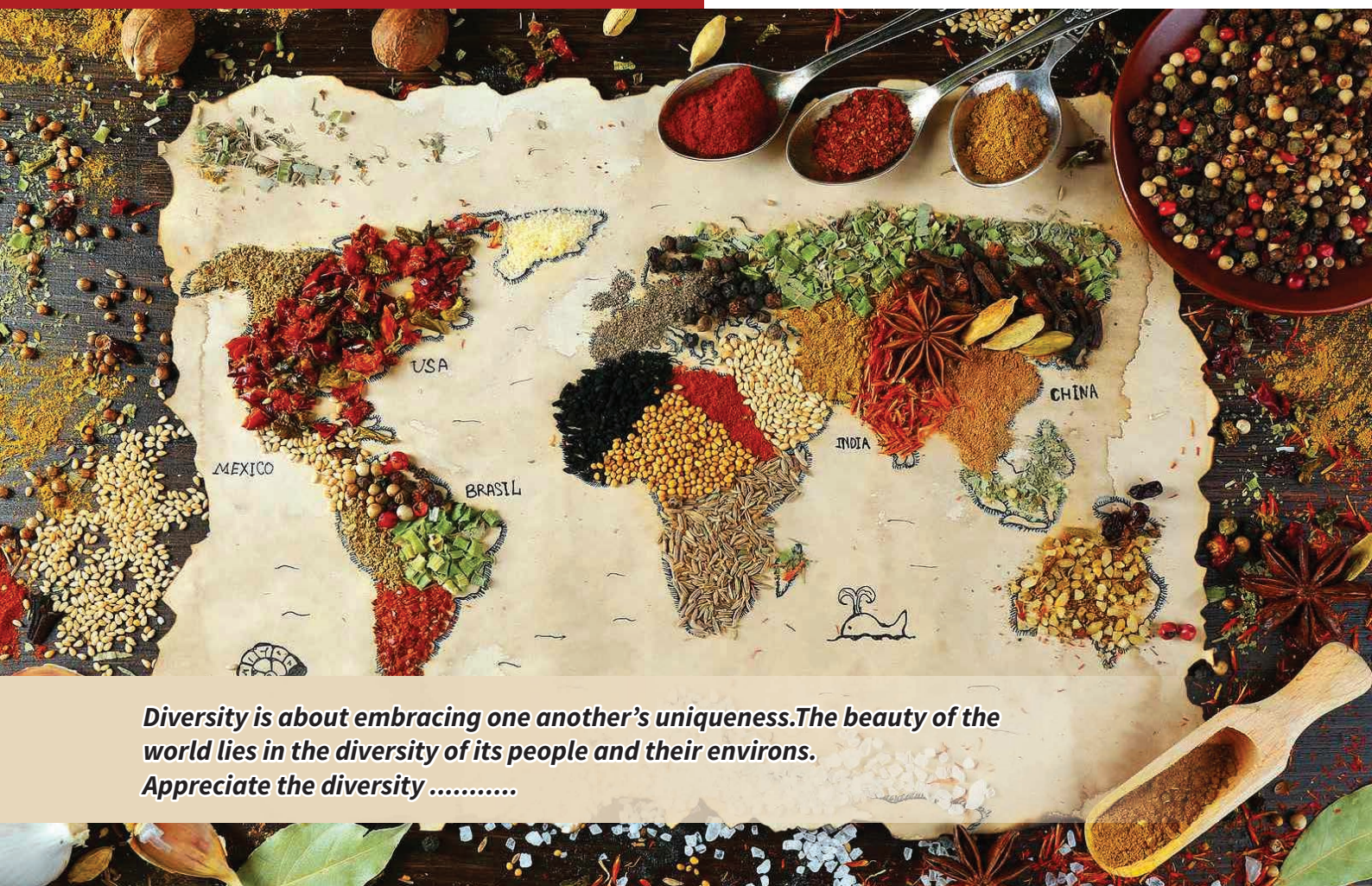
A conference on “Nutritional Management of People living with chronic HIV infection and the role of soy foods” organized in association with SLMNA was held on the 30<sup>th</sup> May 2018 at Taj Samudra Hotel, Colombo. It was followed by a post conference workshop on special anthropometric measurement techniques for medical nutrition trainees.



## 06. 19<sup>th</sup> Congress of PENSA

Members of SLMNA participated for the 19<sup>th</sup> Congress of Parenteral and Enteral Nutrition Society of Asia which was held in Seoul, Korea from 13<sup>th</sup> – 16<sup>th</sup> of June 2018. The President of SLMNA, Dr. Renuka Jayatissa represented Sri Lanka as a committee member of PENSA.

## Capture of the month



*Diversity is about embracing one another's uniqueness. The beauty of the world lies in the diversity of its people and their environs. Appreciate the diversity .....*



# NUTS

Throughout the history, nuts have been a part of the diet around the world. Each nut variety contains its own unique combination of nutrients. Nuts are a good source of,

- ▶ Antioxidants
- ▶ Vitamins and minerals
- ▶ Healthy fat (MUFA and PUFA)
- ▶ Fiber
- ▶ Protein for vegetarians and vegans
- ▶ Have a low Glycemic index



## How many nuts should I eat?

Nuts are naturally high in healthy fats, which will add extra energy to meals. Two to four servings of nuts per day is recommended for Sri Lankan adults. (Food Dated Dietary Guide Line)

One serving of nuts is 1 tablespoon (15g)

## Daily recommendation of 30g, which is equal to:

- ▶ 20 almonds
- ▶ 10 Brazil nuts
- ▶ 15 cashews
- ▶ 4 chestnuts
- ▶ 20 hazelnuts
- ▶ 15 macadamias
- ▶ 15 pecans
- ▶ 2 tablespoons pine nuts
- ▶ 60 pistachios in shells for 30g of kernels
- ▶ 10 whole walnuts or 20 walnut halves
- ▶ A small handful of mixed nuts.



# Variety of nuts

## Almonds



- ▶ Sodium free
- ▶ An excellent source of manganese and vitamin E
- ▶ A good source of Magnesium, copper, phosphorus and fiber

## Cashew



- ▶ Sodium free
- ▶ An excellent source of copper
- ▶ A good source of magnesium, manganese, vitamin K, phosphorus and zinc

## Chestnuts



- ▶ Extremely low in fat and calories compared to other nuts
- ▶ Good sources of vitamin C, folic acid and fiber

## Peanuts



- ▶ Sodium free
- ▶ An excellent source of manganese
- ▶ A good source of folate, Mg, phosphorous, vitamin E and niacin

## Pistachio



- ▶ Sodium free
- ▶ A good source of manganese, copper, thiamine, and phosphorus
- ▶ Contain antioxidants, including lutein and zeaxanthin

## Walnuts



- ▶ Contain omega 3 fatty acid
- ▶ Sodium free
- ▶ An excellent source of manganese and copper
- ▶ A good source of magnesium

## Brazil nuts



- ▶ Sodium free
- ▶ An excellent source of magnesium, copper, selenium, phosphorus
- ▶ A good source of manganese, vitamin E and thiamine



# Ways to enjoy Nuts

01. Add to steamed vegetables



02. Add crunch to cereals



03. Coat your proteins



04. Top your salads



05. Stir-up your stir fry



06. Nutty desserts



## Are nuts good for heart health?



Studies show that consuming about 30g (a handful) of nuts per day may reduce the risk of developing heart disease by 30-50%<sup>8-14</sup> and reduces the risk of death from heart disease by around 20%<sup>15</sup>.

It seems a number of heart-healthy nutrients in nuts work in synergy to achieve this heart protective effect. These include:

- ▶ Health-promoting monounsaturated and polyunsaturated fats that help regulate blood cholesterol
- ▶ Fiber and plant sterols that help reduce cholesterol reabsorption from the gut
- ▶ Arginine (an amino acid which is converted to nitric oxide in the body) which helps keep blood vessels elastic, thereby reducing the risk of atherosclerosis (hardening of the arteries)

- ▶ Antioxidant vitamins and minerals, e.g. vitamin E, copper, manganese, selenium and zinc, and other antioxidant compounds such as flavonoids and resveratrol that reduce oxidation and inflammation
- ▶ Naturally low sodium and high potassium levels which assist in maintaining healthy blood pressure.



## References

01. Li TY, Brennan AM, Wedick NM, Mantzoros C, Rifai N, Hu FB. Regular consumption of nuts is associated with a lower risk of cardiovascular disease in women with type 2 diabetes. *J Nutr.* 2009 Jul;139(7):1333-8. <http://www.ncbi.nlm.nih.gov/pubmed/19420347>
02. Blomhoff R. et al. Health benefits of nuts: potential role of antioxidants. *Brit J Nutr* 2007;96(SupplS2):S52-S60. <http://www.ncbi.nlm.nih.gov/pubmed/17125534>
03. Albert C.M. et al. Nut consumption and decreased risk of sudden cardiac death in the Physicians Health Study. *Arch Intern Med* 2002;162(12):1382-7. <http://www.ncbi.nlm.nih.gov/pubmed/12076237>
04. Ellsworth JL, Kushi LH, Folsom AR. Frequent nut intake and risk of death from coronary heart disease and all causes in postmenopausal women: the Iowa Women's Health Study. *Nutrition Metabolism and Cardiovascular Disease* 2001;11(6):372-7. <http://www.ncbi.nlm.nih.gov/pubmed/12055701>
05. Hu FB, Stampfer MJ, Manson JE, Rimm EB, Colditz GA, Rosner BA, et al. Frequent nut consumption and risk of coronary heart disease in women: prospective cohort study. *British Medical Journal* 1998;317(7169):1341-5. <http://www.ncbi.nlm.nih.gov/pubmed/9812929>
06. Fraser, G.E., et al. A possible protective effect of nut consumption on risk of coronary heart disease. *Arch Intern Med* 1991; 152: 1416-24. <http://www.ncbi.nlm.nih.gov/pubmed/1627021>
07. Ghadimi Nouran M, Kimiagar M, Abadi A, Mirzazadeh M, Harrison G. Peanut consumption and cardiovascular risk. *Public Health Nutr.* 2010 Oct;13(10):1581-6. <http://www.ncbi.nlm.nih.gov/pubmed/20025830>
08. USDA data base





# Factors influencing junk food consumption among children

**Dr. Ayoma Ranathunga**

MBBS, MSc Human Nutrition

Overweight or obesity in children, which is considered to be an epidemic, is attributed to the marketing of energy-dense, nutrient-poor foods to children.<sup>1</sup> The prevalence of overweight among children in Sri Lanka has found to be 2.2%.<sup>2</sup>

Since the eating behavior of humans is formulated since early life it is important to identify the factors those contribute to move children towards junk foods.

A survey on breakfast practices of 4-12 year old school children has observed that the fast foods were the most liked food items. The intake of fruits was low in these children.<sup>3</sup>

Changes in socioeconomic and family structure has led to more female employment<sup>4</sup> and most preschool children are cared by caregivers or in the out of home care services. In Sri Lanka 36.5% of the economically active population in 2016 was comprised of females.<sup>5</sup> Women have less time for cooking and family spends less time together at mealtimes. As a consequence these children are fed by a caregiver other than a parent<sup>6</sup> and have more access to unhealthy foods with high energy, high fat and high salt junk foods purchased outside.<sup>7</sup>

Taste and smell senses are functional since fetal life so that fetus gets first experience of flavors in maternal diet when continuously swallowing amniotic fluid. Many flavors in the maternal diet transmitted in the breast milk hence influence the infants by milk consumption. These evidences suggest that preferences for tastes were formulated in early life.<sup>8</sup>

Several studies have revealed concerns on higher consumption of energy dense nutrient poor food in young children's diet.<sup>9,10,11</sup> It is apparent that parental behavior of offering convenient foods influences the consumption pattern of the young children.

Children's preferences and food consumption pattern reflects the foods that become familiar for them. Foods that are readily available and accessible at home creates a high preference for them.<sup>12</sup> Availability of fruits, 100% fruit juices and vegetables significantly correlates with the high preference for those foods by children.<sup>13</sup> Similarly school girls who are frequently offered milk instead of other sweetened beverages have shown preference for milk and milk products over other beverages.<sup>14</sup>

Not only the availability affects the high intake but also the amount available significantly increases the intake of foods. Large food portions served to children by caregivers or by restaurants promote greater energy intake, fat and salt intake.<sup>15</sup> Therefore eat out habits contribute largely to the consumption of increased amount of junk foods.

Social modelling also has an impact on preschool and school children's preferences toward food consumption. A study has observed that the selection of vegetables by preschool children is affected by the food choices of their peers.<sup>16</sup> Another study has found that there is a similar effect when children see their teacher enthusiastically eating a particular food but it was not as effective as when they are influenced by their peers.<sup>17</sup>

The impact of parenting styles on children's eating pattern is crucial. Feeding their child is one of the major tasks involved in parenting. Parent-child interaction during eating powerfully influences the child's eating pattern, diet quality, food preferences, weight status and growth. Autonomy of eating should be allowed to children to some extent. Research shows that parents' attempts to promote eating healthy foods and restricting unhealthy foods 'junk foods' have a negative impact on child's food choices and self-regulation of intake of energy dense foods.<sup>18</sup>

Using sweet palatable foods as rewards for good behavior has increased children's attitude and preference for those foods. Junk foods are most often used as rewarding foods.<sup>19</sup>

Parents being the providers and role models play a significant role in manipulating the early exposure to foods and eating patterns genetically and environmentally. They select the foods in their family diet, show the act of eating and use feeding practices encouraging children to develop same eating pattern. Infants and young children eagerly learn to eat diversity of foods in their culture's adult diet.<sup>20</sup>

Television advertisements on fast foods promotes fast food eating habits in young children and who watch more television are more susceptible to unhealthy eating habits.<sup>21</sup> Television promotion of junk foods makes it even difficult for most parents to promote healthy eating at home.<sup>22</sup> Food marketing targets children who are too young to perceive the truth in advertising.<sup>23</sup> Thus, it strongly influences children's food preference requests, which is known as 'pester power'.<sup>24</sup>

Nearly all foods featured in advertising targeted toward young people have high levels of calories, total fat, saturated fat, sugar or sodium (i.e. they are unhealthy, calorie-dense, nutrient-poor foods, or 'junk' foods) and are often nutritionally inferior to products targeting adults.<sup>25</sup>

## **Summary**

**Various factors influence children's tendency to move towards consumption of junk foods. The fetus first familiarize with tastes of maternal diet via the amniotic fluid and then the infant through the breast milk. Parenting style, feeding practices, caregiver factors, women employment, lifestyle changes in modern family structure, social stimulation, availability, accessibility, types and portion size of the restaurant foods, and food advertising have been identified as main contributory factors for the increased junk food consumption by children.**

## **References**

01. Swinburn BA, Caterson I, Seidell JC, James WPT. Diet, nutrition and the prevention of excess weight gain and obesity. *Public Health Nutr.* 2004; 7:123-146. [PubMed: 14972057]
02. Jayatissa R, Ranbanda RM. Prevalence of Challenging nutritional problems among adolescents in Sri Lanka. *Food and Nutrition Bulletin* 2006; 27:153-60
03. A survey of breakfast practices of 4-12 year old children M P Senanayake<sup>1</sup>, H M L N Parakramadasa<sup>2</sup> *Sri Lanka Journal of Child Health*, 2008; 37: 112-117
04. Bureau of Labor Statistics. *Women in the Labor Force: A Databook*. U.S. Department of Labor; 2004.
05. Department of Census and Statistics. *Sri Lanka Labour Force Statistics Quarterly Bulletin*; 2016.
06. U.S. Census Bureau. *Survey of Income and Program Participation, Who's Minding the Kids? Child Care Arrangements*. Spring;1999
07. Nielsen SJ, Siega-Riz AM, Popkin BM. Trends in Energy Intake in U.S. between 1977 and 1996: Similar Shifts Seen across Age Groups. *Obesity Research* 2002; 5:370-378. [PubMed: 12006636]
08. Jennifer S. Savage, Jennifer Orlet Fisher, and Leann L. Birch. Parental Influence on Eating Behavior: Conception to Adolescence. *J Law Med Ethics*. 2007; 35(1): 22-34.



09. Fox MK, Pac S, Devaney B, Jankowski L. Feeding Infants and Toddlers Study: What Foods are Infants and Toddlers Eating? *Journal of the American Dietetic Association* 2004;104(Supplement 1):S22–S30. [PubMed: 14702014]
10. Devaney B, Ziegler P, Pac S, Karwe V, Barr SI. Nutrient Intakes of Infants and Toddlers. *Journal of the American Dietetic Association* 2004;104(1 Supplement 1):S14–21. [PubMed: 14702013]
11. Fox MK, Devaney B, Reidy K, Razafindrakoto C, Ziegler P. Relationship between Portion Size and Energy Intake among Infants and Toddlers: Evidence of Self-Regulation. *American Journal of the Dietetics Association* 2006; 106:S77–S83.
12. Kratt P, Reynolds K, Shewchuk R. The Role of Availability as a Moderator of Family Fruit and Vegetable Consumption. *Health Education and Behavior* 2000;27(4):471–482. [PubMed: 10929754]
13. Availability, Accessibility, and Preferences for Fruit, 100% Fruit Juice, and Vegetables Influence Children's Dietary Behavior. *Health Education and Behavior* 2003;30(5):615–626. [PubMed: 14582601]
14. Fisher JO, Mitchell DC, Smiciklas-Wright H, Mannino ML, Birch LL. Meeting Calcium Recommendations during Middle Childhood Reflects Mother-Daughter Beverage Choices and Predicts Bone Mineral Status. *American Journal of Clinical Nutrition* 2004; 79(4):698–706. [PubMed: 15051617]
15. Rolls RJ, Engell D, Birch LL. Serving Portion Size Influences 5-Year-Old but Not 3-Year-Old Children's Food Intakes. *Journal of the American Dietetic Association* 2000; 100(2):232–234. [PubMed: 10670398]
16. Birch LL. Effects of Peer Models' Food Choices and Eating Behaviors on Preschoolers' Food Preference. *Child Development* 1980; 51:489–496.
17. Hearn M, Baranowski T, Baranowski J, Doyle C, Smith M, Lin LS, Resnicow K. Environmental Influences on Dietary Behavior among Children: Availability and Accessibility of Fruits and Vegetables Enable Consumption. *Journal of Health Education* 1998; 29(1):26–32.
18. Faith MS, Scanlon KS, Birch LL, Francis LA, Sherry B. Parent-Child Feeding Strategies and their Relationships to Child Eating and Weight Status. *Obesity Research* 2004;12(11):1711–1722. [PubMed: 15601964]
19. Birch LL, Zimmerman SI, Hind H. The Influence of Social-affective Context on Preschool Children's Food Preferences. *Child Development* 1980; 51:856–861.
20. M. Hendy H. Effectiveness of Trained Peer Models to Encourage Food Acceptance in Preschool Children. *Appetite* 2002; 39(3):217–225.
21. Signorielli N, et al, (1992). Television and children's conceptions of nutrition: unhealthy messages. *Health Commun*, 2(4), pp. 245–57
22. Kourlaba G, et al, (2009). Dietary patterns in relation to socioeconomic and lifestyle characteristics among Greek adolescents: A multivariate analysis. *Public Health Nutrition*, 12(13), pp. 66–72
23. Pomeranz JL. Television food marketing to children revisited: the Federal Trade Commission has the constitutional and statutory authority to regulate. *J Law Med Ethics*. 2010; 38:98–116. [PubMed: 20446988]
24. Hastings, G.; Stead, M.; McDermott, L., et al. Review of Research on the Effects of Food Promotion to Children. Glasgow, UK: University of Strathclyde Centre for Social Medicine; 2003.
25. Harris JL, et al, (2012). Protecting Young People From Junk Food Advertising: Implications of Psychological Research for First Amendment Law. *American Journal of Public Health*, 102(2), pp. 214–222

**Stay connected  
with  
SLMNA**

**Sri Lanka Medical Nutrition Association,  
P.O. Box 527, Dr. Danister De Silva Mawatha, Colombo 08.**